

MINOS+ Status Report



Xinjie Qiu All Experimenters' Meetings September 16, 2013



Near Detector





• Warm/hot channels

- Replaced two minders last Tuesday.
- Another two new warm channels were developed.
- Will replace them during next beam downtime.
- Low rate minders (0-18-6, 0-20-1)
 - Confirmed the correct voltage are present at both output spigots on the back of the HV Mainframe AND at the PMT's input.
 - Had previously increased the voltage, but did not see effects on the rate.
 - Suggests PMT/ Alner box issue, need practice a replacement procedure to reduce the down time.



Near Detector





• Beam-on new DAQ validation

- Validation was done on cosmic data
- Plan to take stable beam data with both old and new DAQ and make comparison.
- Once the reconstruction and the calibration group certify the data taken with the new DAQ, we will completely switch to the new DAQ.

Email alarms for MINOS DAQ

- A process to watch the DAQ status both at ND and FD, and to send out email if in ERROR state.
- Added another layer of notification/protection during period when no one is on shift.
- ND DAQ running very well



Far Detector





Two RIOs are being repaired

- Shipped back from the factory, CES.
- Bill has tested and shipped a Fixed RIO to Soudan.

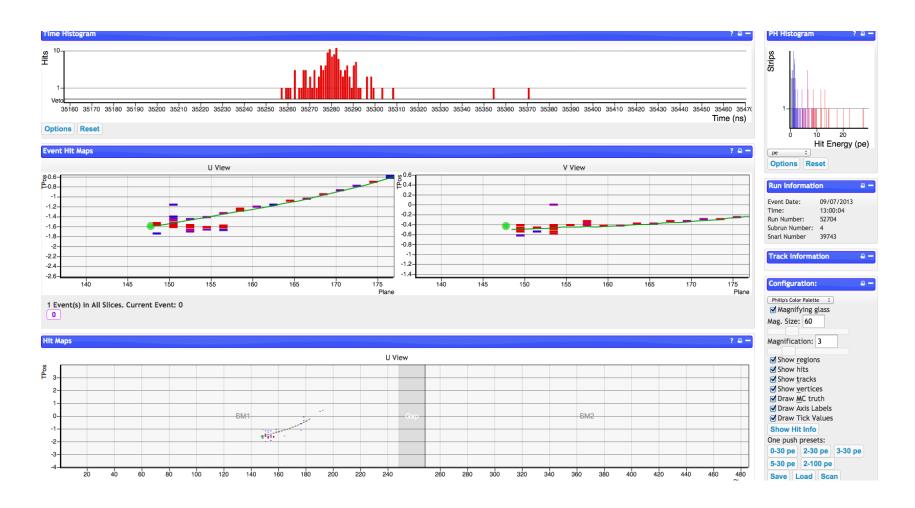
FD DAQ crashed during the past weekend

- Symptom: After reset, the ROP's would reload correctly, but BRP03 would lock up as soon as the PVIC tried initializing.
- The mine crew and DAQ experts worked tirelessly during the weekend and today.
- It was eventually found to be a optical fiber cable connection problem in ROP7.
- The FD DAQ is back to normal data taking again!



One of the first MINOS+FD Neutrino Events of 2013

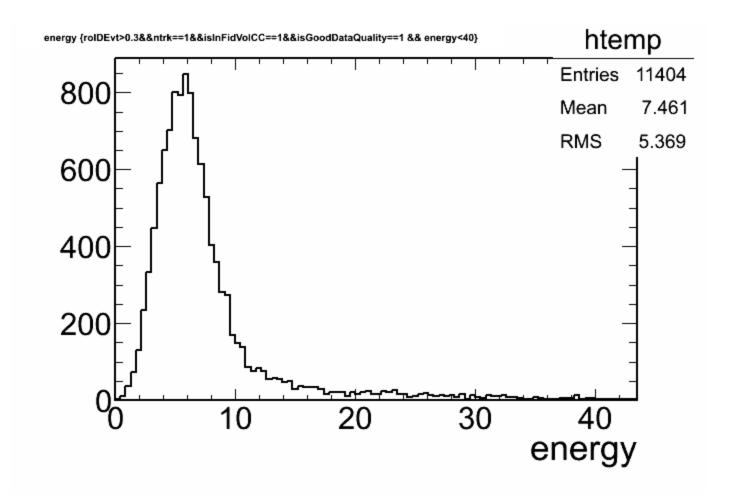






MINOS+ Neutrino Energy plot from ND "online" dsts







MINOS+ Status



- Thanks AD, neutrino beam is back! And neutrinos have arrived to FD.
- We are taking good data.
- Regular shifts are underway
 - Shifts are covered for the next two months.
- New Remote Operation Center
 - Tufts scheduled a three-day shadow shift next week to obtain qualification.
 - Once certified, Boston-based MINOS+ institutions, Tufts and Harvard, will be able to take official MINOS+ shift remotely.